

December 2020

# U.S. Equipment & Software Investment Momentum Monitor



CONTACT INFORMATION:

**Kelli Nienaber, Executive Director**

Equipment Leasing & Finance Foundation  
knienaber@elfaonline.org  
www.leasefoundation.org

**Jeff Jensen, Senior Director**

Keybridge LLC  
jjensen@keybridgedc.com  
www.keybridgedc.com

## About the U.S. Equipment & Software Investment Momentum Monitor

Business leaders require actionable forward-looking intelligence to make strategic decisions. Accordingly, the Equipment Leasing & Finance Foundation commissioned Keybridge LLC to develop a series of custom leading indicators for the equipment sector. Published monthly, the “U.S. Equipment & Software Investment Momentum Monitor” consists of indices for the 12 equipment and software investment verticals listed below. These indices are designed to identify turning points in their respective investment cycles with an approximate 6-month lead time.

The Momentum Monitor is based on Keybridge’s extensive research which shows that not all movements in economic data are reliable signals of future economic trends. Keybridge has operationalized its research by constructing indices, each comprised of 10–20 high-frequency indicators. These indicators undergo rigorous testing to determine the optimal thresholds at which their short-term fluctuations are economically meaningful. In simpler terms, the Momentum Monitor sifts out the “noise” in the data and identifies the dominant trends. As a result, each Momentum Monitor index is statistically optimized to signal turning points in the investment cycle without giving false readings of shifts in momentum.

The Momentum Monitor covers 12 equipment and software verticals as defined by the U.S. Department of Commerce, Bureau of Economic Analysis.

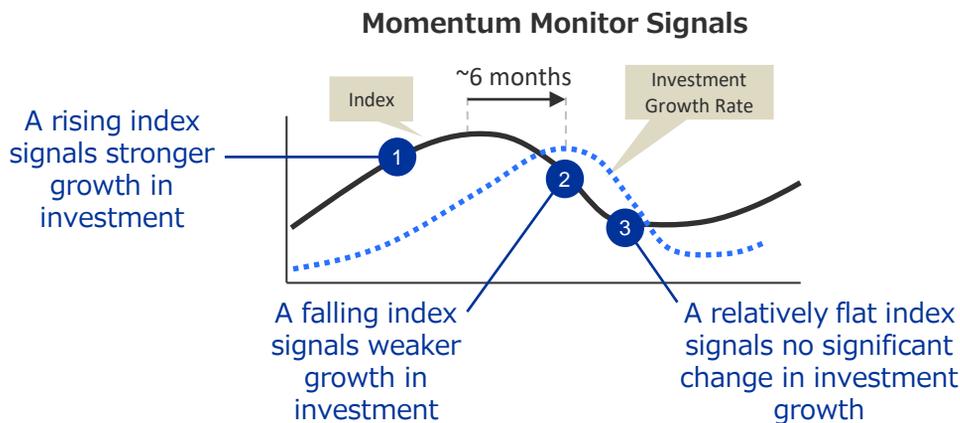
## U.S. Equipment & Software Investment Momentum Monitor – 12 Verticals

- |                                   |                       |
|-----------------------------------|-----------------------|
| 1) Agriculture Machinery          | 7) Aircraft           |
| 2) Construction Machinery         | 8) Ships and Boats    |
| 3) Materials Handling Equipment   | 9) Railroad Equipment |
| 4) All Other industrial Equipment | 10) Trucks            |
| 5) Medical Equipment              | 11) Computers         |
| 6) Mining & Oilfield Machinery    | 12) Software          |

## How to Read the Monitor

Each Momentum Monitor index provides a signal of the direction and magnitude of growth in equipment investment over the next six months. It is important to note that index values do not correspond to particular growth rates. Instead, the Momentum Monitor indices should be interpreted within the context of prior index readings and investment growth rates. For example, there are several simple rules to follow when examining the latest index values:

- 1) A rising index signals that growth in investment will accelerate from the current rate;
- 2) A falling index signals that growth in investment will decelerate from the current rate; and
- 3) No change in the index signals no meaningful change from the current growth rate.



To help the reader interpret the latest Momentum Monitor signals, a summary report for each equipment vertical follows a specific outline:

### Materials Handling Equipment:

- 1 Investment in Materials Handling Machinery inched up at a 0.3% annualized rate in Q4 2014 and is up 7.3% year-over-year.
- 2 The Materials Handling Momentum Index slipped from 93.5 in February to 92.5 in March.
- 3 A 23% decline in the MNI-Chicago Business Barometer and a spike in Economic Policy Uncertainty offset gains in Machinery Sales, Manufacturing Sales, and the ISM Manufacturing Suppliers Deliveries Index.
- 4 The Index's recent trend continues to indicate that growth may moderate over the next six months.

- 1) The first sentence reports the latest growth rate for investment in a given vertical. This provides a context for interpreting the order of magnitude of growth over the next six months.
- 2) The second sentence explains the latest movement in the index, indicating whether momentum is accelerating or decelerating.
- 3) The report then describes the recent movements of one or more indicators to help to explain the index's latest reading.
- 4) Finally, the report ends with an interpretation of where investment growth is heading over the next six months based the index's recent movement and historical strength.

# U.S. Equipment & Software Investment Momentum Monitor

## December 2020

### Momentum Monitor Sector Matrix



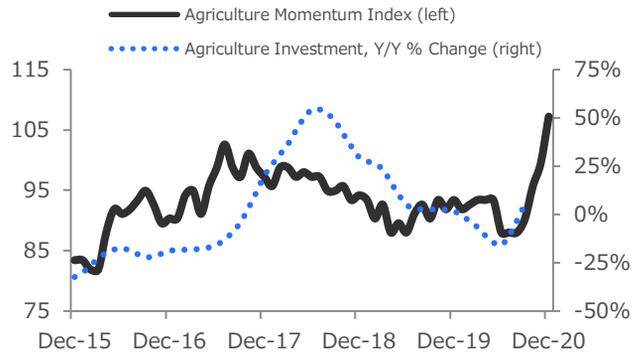
The matrix above summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- **"Recent Momentum"** represents the degree of an indicator's recent acceleration or deceleration in the past month relative to its average movement during the previous 3 months. Ratings closer to "0" represent an indicator that is rapidly decelerating, while ratings closer to "10" represent an indicator that is rapidly accelerating.
- **"Historical Strength"** represents the strength or weakness of an indicator in the past month relative to its typical level since 1999. Ratings closer to "0" represent an indicator that is weaker than average, while ratings closer to "10" represent an indicator that is stronger than average.

The matrix is comprised of four quadrants according to each vertical's recent momentum and historical strength readings. If a vertical is located in the top-left quadrant, its momentum reading is higher than average, but positive movement has slowed (and perhaps reversed) in recent months — suggesting that investment levels may fall over the next two quarters. Verticals located in the bottom-right quadrant, however, have momentum readings that are below average, but recent movement shows promise — suggesting that investment levels may rise over the next two quarters. This makes them potentially attractive targets for new short-term leasing and finance opportunities.

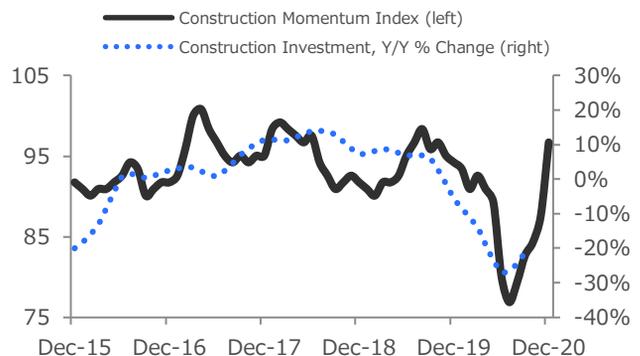
**Agriculture Machinery:**

Investment in Agricultural Machinery surged 164% (annualized) in Q3 2020 and is up 6.0% from one year ago. The Agriculture Momentum Index jumped from 99.5 (revised) in November to 107.2 in December, the highest level since 2012. In November, the M1 Money Supply grew 8.4%, and the Dollar-Renminbi Exchange Rate increased 1.8%. Overall, the Index's multi-year high suggests investment growth in agriculture machinery will accelerate in the coming 1-2 quarters.



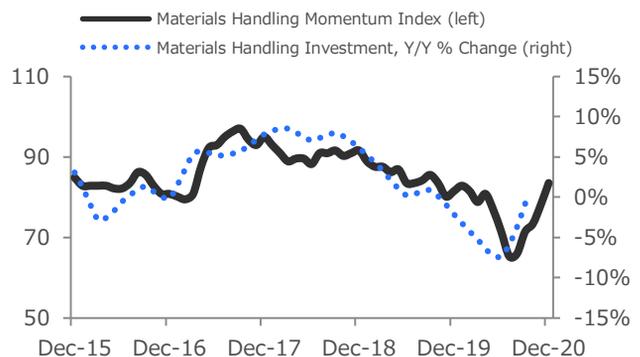
**Construction Machinery:**

Investment in Construction Machinery expanded 31% (annualized) in Q3 2020 but is down 21% year-over-year. The Construction Momentum Index jumped from 87.6 (revised) in November to 96.7 in December. In October, Shipments of Construction Machinery improved 3.5% and Privately Owned Homes Under Construction rose 1.2%. Overall, the Index's current position points to improvement in construction machinery investment growth in the coming six months.



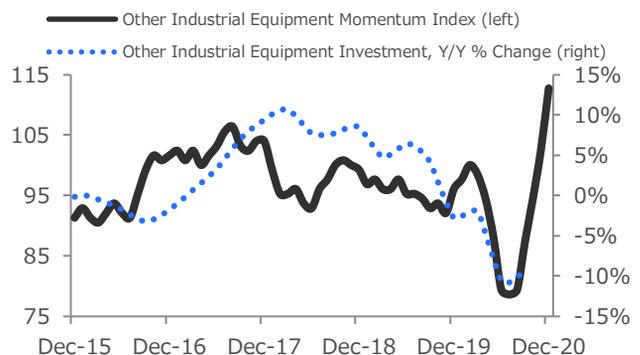
**Materials Handling Equipment:**

Investment in Materials Handling Equipment grew at a 40% annualized rate in Q3 2020 but eased 0.8% year-over-year. The Materials Handling Momentum Index increased from 78.2 (revised) in November to 83.5 in December. In October, Inventories of Materials Handling Equipment fell 1.7%, but Shipments of Materials Handling Equipment improved 1.0%. Overall, the Index points to a return to positive growth in materials handling equipment investment over the next six months.



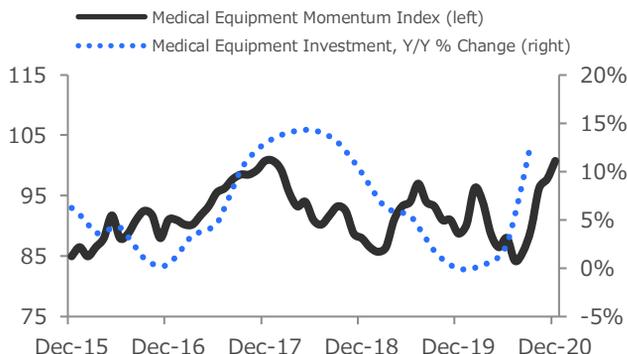
**Other Industrial Equipment:**

Investment in All Other Industrial Equipment grew 6.7% (annualized) in Q3 2020 but was 9.0% below year-ago levels. The Other Industrial Equipment Momentum Index increased sharply from 102.4 (revised) in November to 112.7 in December, the highest level since mid-2011. Capacity Utilization for Electrical Equipment Manufacturing improved 1.4 percentage points to 70.2% in October, while Manufacturing Employment edged up 0.2% in November. Overall, the Index points to a strong resurgence in other industrial equipment investment growth over the next 1-2 quarters.



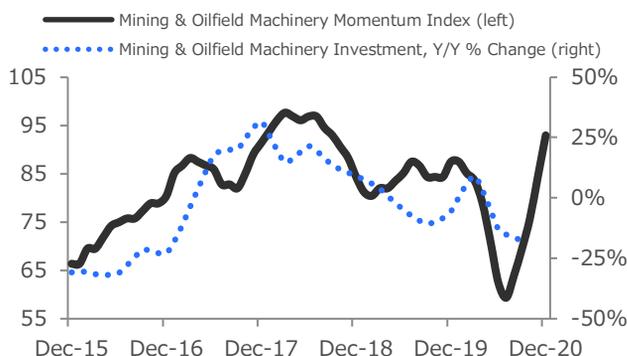
**Medical Equipment:**

Investment in Medical Equipment rose 42% (annualized) in Q3 2020 and was up 13% year-over-year. The Medical Equipment Momentum Index improved from 97.7 (revised) in November to 100.8 in December. Real New Orders of Nondefense Capital Goods surged 10% in September, and Medical Equipment and Supplies Industrial Production rose 3.5% in October. Overall, the Index points to continued robust growth in medical equipment investment over the next six months.



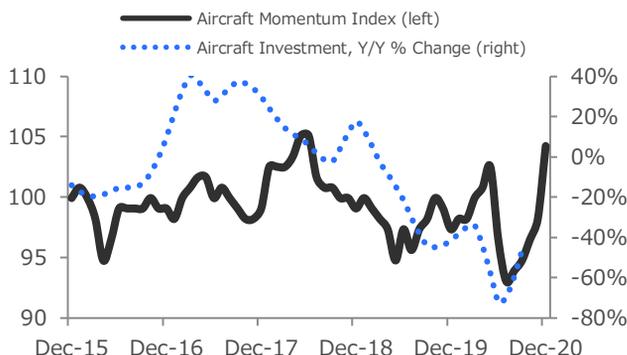
**Mining & Oilfield Machinery:**

Investment in Mining & Oilfield Machinery dropped 37% (annualized) in Q3 2020 and is down 18% compared to a year ago. The Mining & Oilfield Machinery Momentum Index rose from 84.4 (revised) in November to 93.0 in December. Natural Gas Distribution Industrial Production edged up 0.1% in October, but Crude Oil Production grew 5.7% in November. Overall, the Index points to potential improvement in mining & oilfield investment growth over the next six months, but growth may remain in negative territory.



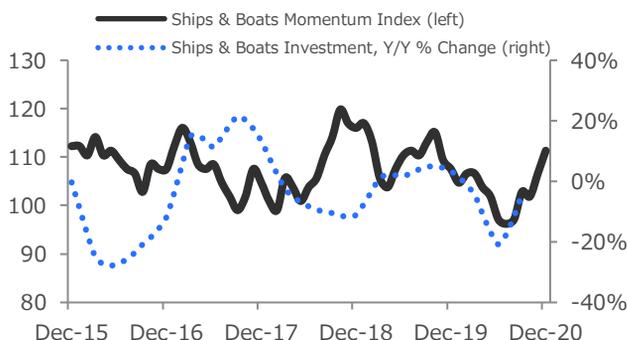
**Aircraft:**

Investment in Aircraft surged 322% (annualized) in Q3 2020 but was 46% below year-ago levels. The Aircraft Momentum Index increased from 98.2 in November to 104.2 in December. The Passenger Transportation Services Index surged 58% in September, however, the S&P 500 Volatility Index pulled back 46% in November. Recent improvements in the Index suggest that aircraft investment growth may have bottomed out earlier in the year and should improve over the next three to six months (though it is likely to remain in negative territory on a year-over-year basis)



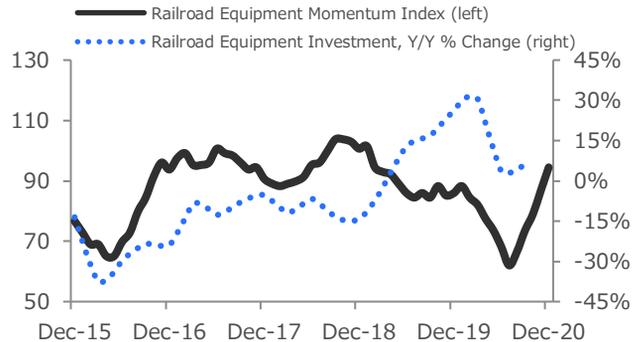
**Ships & Boats:**

Investment in Ships & Boats rose at an annualized rate of 204% in Q3 2020 but was down 3.7% year-over-year. The Ships & Boats Momentum Index improved from 106.6 (revised) in November to 111.3 in December. Exports of Ships, Boats, and Floating Structures to China surged 446% in October, but the Emerging Market Economies Currency Index eased 3.5 points to 124.0 in November. Overall, the Index points to positive ships & boats investment growth over the next two quarters.



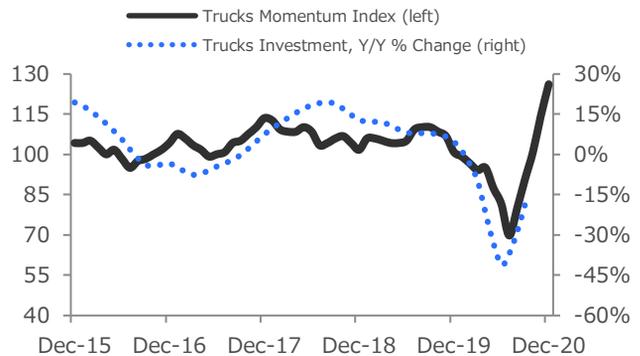
**Railroad Equipment:**

Investment in Railroad Equipment improved 13% (annualized) in Q3 2020 and is up 6.1% year-over-year. The Railroad Equipment Momentum Index improved from 86.7 (revised) in November to 94.4 in December. Railroad Rolling Stock Industrial Production improved 1.5% in October, and Rail Carloads of Coal surged 29% in November. Overall, the Index points to stronger growth in railroad equipment investment over the next 3-6 months.



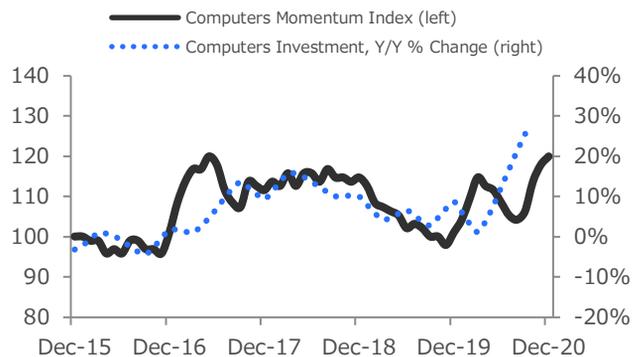
**Trucks:**

Investment in Trucks surged 296% (annualized) in Q3 2020 but was down 19% from year-ago levels. The Trucks Momentum Index jumped from 114.3 (revised) in November to 126.1 in December, the highest level in a decade. In October, Earnings for Freight Trucking improved 2.1%, and Manufacturers' Inventories of Light Trucks & Utility Vehicles rose 6.1%. Overall, the Index continues to point to a rebound in trucks investment growth over the next two quarters.



**Computers:**

Investment in Computers jumped 41% (annualized) in Q3 2020 and is up 25% year-over-year. The Computers Momentum Index jumped from 117.9 (revised) in November to 120.0 in December. In October, Computers & Electronic Products Exports rose 6.8%, while Industrial Production of Computers & Computer Peripheral Equipment increased 2.4%. Overall, the Index points to continued, robust growth in computers investment over the next six months.



**Software:**

Investment in Software rose 8.0% (annualized) in Q3 2020 and grew 4.8% from a year ago. The Software Momentum Index increased from 95.4 (revised) in November to 99.6 in December. Prices for Computer Software & Accessories grew 4.6% in November, and the ZEW Economic Situation Report improved 2.2% in December. The Index continues to suggest that software investment growth will improve over the next two quarters.

